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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/261,197	03/03/1999	BRIAN E. MCBRIDE	53921/56	7444
27155	7590	12/16/2004	EXAMINER	
MCCARTHY TETRAULT LLP SUITE 4900, P.O. BOX 48 66 WELLINGTON ST. WEST TORONTO, ON M5K 1E6 CANADA			STEVENS, ROBERTA A	
			ART UNIT	PAPER NUMBER
			2665	

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 09/261,197	Applicant(s) MCBRIDE, BRIAN E.	
	Examiner Roberta A Stevens	Art Unit 2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-10,12,13,15-37,39,40 and 43-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-10,12,13,15-37,39,40 and 43-49 is/are rejected.
- 7) ☒ Claim(s) 50 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 4-10, 12, 13, 15-37, 39, 40 and 43-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiltner (U.S. 5119368) in view of Pawelski (U.S. 6307869 B1).

3. Regarding claims 1 and 6, Hiltner teaches (figure 1, 3-4 and 6-8) a method and apparatus for generating digital traffic for use in testing a multi-port communications device comprising: generating a reference pattern defining the digital traffic and generating a plurality of traffic streams from the reference pattern, wherein the plurality of traffic streams are used for loading respective input ports of the communications device; and introducing a plurality of delays among the plurality of traffic streams when compared to the reference digital traffic pattern, the transmission of one traffic stream begins at a time between boundaries of time units of a transmission rate associated with the one traffic stream. In Hiltner's invention (fig. 3) the input and output transmission rate are equal from adjusting the line delays.

4. Hiltner does not specifically teach one traffic stream of the plurality of traffic streams has a phase delay. However Hiltner does teach (figure 9) a delay line (901) having a propagation length of one time slot (time unit).

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5. Pawelski teaches (column 1, lines 25-29) the difference in distance (line delay) creates a phase delay. It would have been obvious to one of ordinary skill in this art to adapt Pawelski's phase delay to Hiltner's system to maintain synchronism or clock recovery in the system.

6. Regarding claim 3, 7, 9, 12, 15, 19 and 21, Hiltner teaches (figure 4) the communication device effects statistical multiplexing amongst the plurality of traffic streams

7. Regarding claims 4 and 16, Hiltner teaches (figure 4) the traffic streams are continuous digital data.

8. Regarding claims 5, 17, 31-32, 37 and 43, Hiltner teaches (column 2, line 59 –68) the plurality of traffic streams are ATM.

9. Regarding claims 8 and 18, Hiltner teaches (figures 1 and 7-9) an apparatus and method for loading a multi-port communication device with digital traffic, comprising: generating from a digital traffic stream a plurality of digital traffic streams having identical data content thereto; and providing the plurality of digital traffic streams with a plurality of delays there between to input ports of the communication device each delay (line delay) being related to a buffer length (figure 4), transmission of one traffic stream begins at a time between boundaries of time units of a transmission rate associated with the one traffic stream. In Hiltner's invention (fig. 3) the input and output transmission rate are equal from adjusting the line delays.

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10. Hiltner does not specifically teach a phase delay. However Hiltner does teach (figure 9) a delay line (901) having a propagation length of one time slot (time unit).

11. Pawelski teaches (column 1, lines 25-29) the difference in distance (line delay) creates a phase delay. It would have been obvious to one of ordinary skill in this art to adapt Pawelski's phase delay to Hiltner's system to maintain synchronism or clock recovery in the system.

12. Regarding claim 10 and 13, Hiltner teaches (figures 1 and 7-9) an apparatus and method for operating a digital traffic replicating device for use in testing a multi-port communication device, comprising: receiving an input digital traffic streams; and generating a plurality of output digital stream from the input digital traffic streams, wherein a delay is introduced to at least one of the plurality of output digital traffic streams, the delay is determined from a ratio utilizing a buffer length and a transmission of one traffic stream begins at a time between boundaries of time units of a transmission rate associated with the one traffic stream (in Hiltner's invention (fig. 3) the input and output transmission rate are equal from adjusting the line delays), and wherein the plurality of output digital traffic stream have traffic patterns which are replicas of the input digital traffic streams each phase delay (line delay) being related to a buffer length and a transmission rate associated with the traffic (figure 4).

13. Hiltner does not specifically teach a phase delay. However Hiltner does teach (figure 9) a delay line (901) having a propagation length of one time slot (time unit).

14. Pawelski teaches (column 1, lines 25-29) the difference in distance (line delay) creates a phase delay. It would have been obvious to one of ordinary skill in this art to adapt Pawelski's phase delay to Hiltner's system to maintain synchronism or clock recovery in the system.

15. Regarding claim 20, Hiltner teaches (figures 1 and 7-9) an apparatus for loading a multi-port communications device with digital traffic, comprising: means for generating from a digital traffic stream a plurality of digital traffic streams having identical data thereto; and means for providing the plurality of digital traffic streams to input ports of the communication device with a delay introduced to at least one of the plurality of digital traffic streams being determined from a buffer length and a transmission rate associated with the traffic such that transmission of one traffic stream begins at a time between boundaries of time units of a transmission rate associated with the one traffic stream. In Hiltner's invention (fig. 3) the input and output transmission rate are equal from adjusting the line delays.

16. Hiltner does not specifically teach a phase delay. However Hiltner does teach (figure 9) a delay line (901) having a propagation length of one time slot (time unit).

17. Pawelski teaches (column 1, lines 25-29) the difference in distance (line delay) creates a phase delay. It would have been obvious to one of ordinary skill in this art to adapt Pawelski's phase delay to Hiltner's system to maintain synchronism or clock recovery in the system.

18. Regarding claim 22 and 44, Hiltner teaches (figures 1 and 7-9) a digital data stream replicating device, comprising: an input port for receiving an input continuous digital data stream comprising input data blocks at an input transmission rate; broadcast means for replicating the input continuous digital data stream into N streams of replicated continuous digital data streams; N output ports for transmitting the plurality of replicated continuous data streams at output transmission rates, each output transmission rate at least equal to the input transmission rate; and

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delay means for introducing a predetermined delay for each replicated data stream with respect to the input data stream such that transmission of one traffic stream begins at a time between boundaries of time units of a transmission rate associated with the one traffic stream. In Hiltner's invention (fig. 3) the input and output transmission rate are equal from adjusting the line delays.

19. Hiltner does not specifically teach a phase delay. However Hiltner does teach (figure 9) a delay line (901) having a propagation length of one time slot (time unit).

20. Pawelski teaches (column 1, lines 25-29) the difference in distance (line delay) creates a phase delay. It would have been obvious to one of ordinary skill in this art to adapt Pawelski's phase delay to Hiltner's system to maintain synchronism or clock recovery in the system.

21. Regarding claims 24-30, 34-36 and 40, Hiltner teaches (figure 4) the delay means comprising: a memory having N FIFO logical buffers established therein, each logical buffer being associated with on digital data stream of replicated data, wherein when a logical buffer of the N FIFO buffers is full, data blocks associated with the buffer are forwarded to an output port of the N output ports associated the buffer.

22. Regarding claims 33 and 45, Hiltner teaches (figures 1, 4 and 7-9) a digital data stream replicating device for providing data input patterns to a communication device, comprising: an input port for receiving a data stream comprising input data blocks at an input rate; a memory; N output ports having an output transmission rate at least equal to the input transmission rate; processing means connected between the input port and the N output ports, for establishing N FIFO buffers in the memory and associating the blocks with the N buffers so as to replicate the

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input data blocks, each buffer associated with only one output port; and scheduling means for forwarding data blocks through the corresponding output port when the given buffer is full such that transmission of one traffic stream begins at a time between boundaries of time units of a transmission rate associated with the one traffic stream. In Hiltner's invention (fig. 3) the input and output transmission rate are equal from adjusting the line delays.

23. Hiltner does not specifically teach a phase delay. However Hiltner does teach (figure 9) a delay line (901) having a propagation length of one time slot (time unit).

24. Pawelski teaches (column 1, lines 25-29) the difference in distance (line delay) creates a phase delay. It would have been obvious to one of ordinary skill in this art to adapt Pawelski's phase delay to Hiltner's system to maintain synchronism or clock recovery in the system.

25. Regarding claims 23, 39 and 46, Hiltner teaches (figure 4) introducing idle/empty data blocks.

26. Regarding claims 47-49, Hiltner teaches (figure 4) the phase delay (line delay) is determined from a buffer length and the transmission rate.

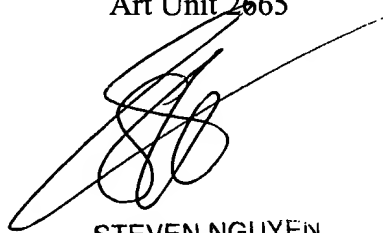
Allowable Subject Matter

27. Claim 50 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

1. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberta A Stevens whose telephone number is 571-272-3161. The examiner can normally be reached on M-F 9:00am-5:30pm.
2. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.
3. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Roberta A Stevens
Examiner
Art Unit 2665

A handwritten signature in black ink, appearing to be 'STEVEN NGUYEN', written over a horizontal line.

STEVEN NGUYEN
PRIMARY EXAMINER